

### **REMARKS**

Claims 1-28 were presented for examination in the present application. The instant amendment cancels claims 9-14, 20, and 23-28 without prejudice. Thus, claims 1-8, 15-19, 21, and 22 are presented for consideration upon entry of the instant amendment.

As noted above, claims 9-14, 20, and 23-28 have been cancelled. Reconsideration and withdrawal of the rejections to claims 9-14, 20, and 23-28 are respectfully requested.

Claims 1-8 and 11-28 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,096,014 ("Haffner"), in combination with WO 99/41310 ("Borealis"). Claims 9 and 10 were rejected under 35 U.S.C. 103(a) as being unpatentable over Haffner, in combination with Borealis, and further in view of U.S. Patent No. 5,008,296 ("Antoon").

Independent claim 1 now recites "A breathable film comprising a composition comprising:(i) 20 - 50 %, based on the weight of the total composition, of a bimodal polyethylene composition made using Ziegler-Natta catalysis, further comprising: (i-a) a first low molecular weight component, which is a homopolymer of ethylene or a copolymer of ethylene and one or more C<sub>4</sub> to C<sub>10</sub> alpha-olefins, having a melt flow rate, determined according to ISO 1133 at 190 degrees Celsius, MFR<sub>2</sub> of 50 to 500 g/10 min and a density of 940 to 975 kg/m<sup>3</sup>, the first component being present in the bimodal polyethylene composition in an amount of 37 to 48 % by weight, and (i-b) at least a second component, which is a copolymer of ethylene and one or more C<sub>4</sub> to C<sub>10</sub> alpha-olefins, having a higher molecular weight, a lower melt flow rate and a lower density than the said first component, the second component being present in the bimodal polyethylene composition in an amount of 52 to 63 % by weight, so that the said bimodal polyethylene composition has a melt flow rate, determined according to ISO 1133 at 190°C, MFR<sub>2</sub> in the range of 0.1 to 4.0 g/10 min, MFR<sub>21</sub> in the range of 15 to

200 g/10 min<sub>1</sub> and a density of 918 to 935 kg/m<sup>3</sup>, 40-70 %, based on the weight of the total composition, a particulate filler, and 0-30 %, based on the weight of the total composition of an propylene homo- or copolymer (emphasis added)".

The cited art fails to disclose or suggest amended claim 1. First of all, Borealis does not disclose or suggest breathable films. The Office Action asserts that it would be obvious to substitute the polymers of Borealis for any of the polymers used in Haffner in order realize the benefits that bimodal polymers give. Claim 1 now covers breathable films only. It must therefore be obvious to use the polymer of Borealis to manufacture not just any film, but a breathable film. Haffner fails to disclose or suggest such a use.

In addition, the Office Action asserts that Borealis discloses that bimodal polymer films can have good properties. The conclusions on page 20 of Borealis are that films made using the bimodal polymer of Borealis have improved impact and tear resistance as well as excellent film homogeneity and processability. Borealis does not mention breathable films however. The Office Action therefore turns to Haffner to argue that making breathable films is also obvious. Haffner in fact makes the opposite true.

Haffner teaches that breathable films should be made from metallocene or "super octene" type polymers. Haffner also tries to make a breathable film from a blend of Ziegler Natta polymers. In table II, film B is a blend of different unimodal Ziegler Natta polymers and an additional LLDPE. Film B has good WVTR and tensile strength but it cannot be stretched. The other films exemplified in Haffner can be stretched. This is why Haffner teaches that for breathable films, it is necessary to use the metallocene polymer. For breathable films, therefore, Haffner teaches away from the use of Ziegler Natta polymers as they do not meet the requirements for stretching, which Haffner requires.

Moreover, the Office Action asserts that that it would be obvious to make films based on bimodal Ziegler Natta polymers as such films can be expected to have good

WVTR and tensile strength. Film B of Haffner is proof of that. That may be true, however, new claim 1 covers breathable films only. While it may therefore be obvious to make films in general, the use of Ziegler-Natta polymers to make breathable films in particular is explicitly taught against in Haffner as these are shown not to stretch. The data in Haffner suggests that film B has incredibly poor strength when stretched in the cross direction. The whole point of the example in Haffner is to show that the Film B composition is wholly unsuitable for use in the manufacture of a breathable film.

Thus, even if the Office Action is right that the disclosure of film B might make it obvious to manufacture some films, e.g. those which require good WVTR or tensile strength, Haffner definitely teaches against making breathable films with a film B type material as it cannot be stretched. That is why film B in Haffner is comparative after all.

Applicants respectfully submit that by using a bimodal polymer in a breathable film, this prejudice can be overcome. Amended claim 1 covers breathable films only. No one starting from the Haffner disclosure would consider making a breathable film based on a Ziegler-Natta bimodal polymer from Borealis, as film B teaches explicitly that such a film cannot be stretched. The evidence in Haffner is that when stretched, the films of the present invention should not be breathable. This does not occur. In fact, Applicants suggest it is because we use a bimodal polymer as opposed to the unimodal polymers of film B that achieves these benefits.

Claim 1 has been amended to exclude the presence of a further LLDPE component. Film B in Haffner includes an additional LLDPE component. In the present application examples, example 9 is the combination of a bimodal polymer with an additional LLDPE component. The resulting film actually exhibits poor WVTR. It is shown, therefore, that the combination of a bimodal polymer and an LLDPE actually weakens WVTR performance. Thus, the addition of the bimodal polymer of Borealis into film B of Haffner would thus result in poor WVTR properties.

In contrast, examples 5 and 6 of the present application have much higher

WVTR. When therefore you use the bimodal polymer and filler alone (example 6) or use the combination of bimodal polymer, filler and a propylene homopolymer/copolymer (example 5), WVTR is much higher according to the present results.

Haffner does not teach the combination of bimodal polymer with propylene homo or copolymer now recited in claim 1. It is clearly shown that this combination is better than the combination with an LLDPE. The combination in new claim 1 is not therefore taught in Haffner.

Moreover, Haffner fails to teach the use of the bimodal polymer on its own - there is an additional LLDPE component in film B which reduces WVTR. For these reasons alone, the cited art fails to disclose or suggest claim 1. Claim 1 is patentable over Haffner in view of Borealis.

The cited art fails to disclose or suggest claim 1 in additional ways. It is firstly noted that Haffner is the closer prior art reference as it describes breathable films. Borealis discloses a polymer film manufactured using a bimodal polymer and that is all. Borealis does not describe breathable films or the presence of additional fillers or components. The Office Action argues that when starting from Borealis, it would be obvious to manufacture a breathable film as claimed in claim 1. Applicants respectfully disagree.

Borealis does not teach the use of the polymer to make breathable films. Breathable films are a particular type of film formed using fillers. The film is stretched and voids are formed adjacent to the filler particles. There are no breathable films in Borealis.

As stated previously, it is clear that Haffner explicitly teaches away from making breathable films from Ziegler-Natta type polymers. Haffner does disclose breathable films but teaches the use of metallocene or super octene polymers to make breathable films. In comparison, Haffner shows what happens when a

breathable film is made from a Ziegler Natta blend that is a film which cannot be stretched. It is not obvious to make breathable films from the polymers disclosed in Borealis, therefore, because the evidence in Haffner suggests it would not work.

In addition, Borealis does not suggest combining the bimodal polymer with another material to form a highly advantageous polymer film.


For each of the reasons stated above, it is clear that the cited art fails to disclose or suggest claim 1. Claim 1 is in condition for allowance. Claims 2-8, 15-19, 21, and 22 depend from independent claim 1 and are in condition for allowance for at least the reasons set forth above with regard to claim 1. Reconsideration and withdrawal of the rejections to claims 1-8, 15-19, 21, and 22 are respectfully requested.

In view of the above, it is respectfully submitted that the present application is in condition for allowance. Such action is solicited.

If for any reason the Examiner feels that consultation with Applicants' attorney would be helpful in the advancement of the prosecution, the Examiner is invited to call the telephone number below.

Respectfully submitted,

Date: January 20, 2010

  
Paul D. Greeley  
Registration No. 81,019  
Attorney for Applicant(s)  
Ohlandt, Greeley, Ruggiero & Perle, L.L.P.  
One Landmark Square, 10<sup>th</sup> floor  
Stamford, CT 06901-2682  
Tel: (203) 327-4500  
Fax: (203) 327-6401